

Claims

1. Item of footwear (1), which is intended for sporting use, in particular motorcycling, comprising:

- a first rigid shell which defines a body (2) which is intended to receive the foot of a user and which extends in an extension direction (8),
- a second rigid shell which defines an upper (4) which is intended to receive the leg of the user and which extends substantially in an upright direction (10),
- an articulation (6) which connects the body and the upper, said articulation allowing the upper to rotate relative to the body in a transverse direction (12) which is substantially perpendicular to the extension direction (8) and the upright direction (10), in order to allow flexion of the foot of the user,

- stop means for limiting the rotation of the upper (4) relative to the body (2) in the transverse direction (12) within a maximum rotation range, said stop means comprising:

- first stop means comprising a first element (32a) which is connected to the body and a second element (32b) which is connected to the upper, one coming into contact with the other in order to limit the rotation of the upper (4) relative to the body (2) in the transverse direction (12) in a first rotation direction,
- second stop means comprising a first element (34a) which is connected to the body and a second element (34b) which is connected to the upper, one coming into contact with the other in order to limit the rotation of the upper (4) relative to the body (2) in the transverse direction (12) in a second rotation direction counter to the first rotation direction,

- damping means (14) having an inactive state when the upper and the body move relative to each other within a normal rotation range, which is not zero and which is strictly included within the maximum rotation range, so that the damping means are active only when the upper and the body move relative to each other between the normal rotation range and the maximum rotation range, said damping means comprising:

- first damping means (16, 18, 20) which produce a couple in the transverse direction opposing the moving together of the first and second stop elements of the first stop means, and
- second damping means (16, 18, 22) which produce a couple in the transverse direction opposing the moving together of the first and second stop elements of the second stop means,

said item of footwear being characterised in that the maximum rotation range in the transverse direction (12) extends over from 50 degrees to 70 degrees and the normal rotation range in the transverse direction (12) extends over from 30 degrees to 50 degrees and is substantially centred relative to the maximum rotation range.

2. Item of footwear according to claim 1, characterised in that the damping means comprise a thin flexible plate (16, 18) which has a first end (16b, 18b) which is connected to one (4) of the two shells and a second end (16a, 18a) which moves freely within the normal rotation range and which comes into abutment with the other shell (2) between the normal rotation range and the maximum rotation range.

3. Item of footwear according to claim 2, characterised in that the thin flexible plate (16) is connected to said shell (4) near the articulation (6).

4. Item of footwear according to claim 2 or claim 3, characterised in that the thin flexible plate (16) has a curved portion (44) which extends around the articulation (24, 26).
5. Item of footwear according to claim 4, characterised in that it comprises two thin flexible plates (16, 18) which are arranged symmetrically relative to a centre plane (P) which is defined by the extension direction (8) and the upright direction (10), said thin flexible plates being connected (36) to each other at the connected end (16b, 18b) thereof.
6. Item of footwear according to any one of the preceding claims, characterised in that the first damping means (16, 18, 20) and the second damping means (16, 18, 22) are each active over a rotation range in the transverse direction (12) of from 5 to 20 degrees.